



March 30, 2016

Town of Hingham
Zoning Board of Appeals
210 Central Street
Hingham, Massachusetts 02043

Re: Avalon Hingham Shipyard II
Response to Engineering Peer Review Comments.

Dear Members of the Board:

Howard Stein Hudson (HSH) has reviewed the comment letter from Amory Engineers, P.C. to the Board for Avalon Hingham Shipyard II – Comprehensive Permit, dated March 8, 2016, and offers the following responses:

GENERAL COMMENTS

Comment 1: We believe the Application complies with the Massachusetts Department of Housing and Community Development Comprehensive Permit Regulations, 760 CMR 56.05 (2) – Elements of Submission and Hingham Board of Appeals Rules and Regulations, Section II, E, Comprehensive Permit Submittal Requirements.

Response: No response required

Comment 2: The number of units and bedrooms needs to be clarified. The Application and Sheet C0.00 (cover sheet) of the plan set both list 250 units, yet the number of one and two bedroom units differ. There are a total of 246 units shown on the Architectural Floor Plans (Sheets A-101.0, A-102.0 and A-104-0). Also, the average size of the units shown on the Architectural Floor Plans, especially the three bedroom units, differs from the Application and Sheet C0.00. See Table 1, attached, for more information.

Response: Please refer to the Supplemental package submitted by the Proponent. The number of units, unit mix, and average unit size has changed. There are now 190 units total.

Comment 3: We question the area of open space listed in the Application (10,243 s.f.). The Post-Construction Hydrology calculations included in the Stormwater Management Report indicates



9,021 s.f., which is approximately what we scaled off the plans (8,950 s.f.). However, approximately 640 s.f. is located in the western portion of the visitor parking area, which is within an easement on adjacent property and not on the subject property. This should not be counted toward the open space. We understand that the applicant is seeking waivers from ZBL Sections IV-E.1.d and IV-E.1.f. Section IV-E.1.d requires 2,000 s.f. of open space per unit which is not within a fifty-foot landscaped buffer from property lines. Section IV-E.1.f. establishes the fifty-foot buffer and if the Board does not grant the waiver from this section, total open space actually on site would be about 265 s.f., or about 1 s.f. per unit.

Response: HSH will review the open space calculation.

Comment 4: There are proposed retaining walls shown on the plans. We note the following:

- a. The proposed wall at the southwest corner of the resident parking area will be greater than four feet in height. Walls over four feet in height require a building permit and design by a registered structural engineer.

Response: A structural engineer will be engaged after the comprehensive permit process for the final design of the retaining walls.

- b. Based on proposed grading the wall in the northwest portion of the site, along the north property line should be extended east approximately 460 feet toward USS Amesbury Drive.

Response: This area has been re-graded utilizing a portion of the adjacent site, which is controlled by the Applicant. Please refer to the Supplemental package where the grading on the north side has been clarified.

- c. Details of retaining wall design should be shown on the plans.

Response: A schematic detail of the retaining wall is provided in the Supplemental package. The final design is expected to be completed after the comprehensive permit process.

Comment 5: There is a bike storage area shown in the northwest portion of the site. It appears that this may be a structure. Architectural drawings/details should be included in the plans.

Response: A separate bike storage structure is no longer being proposed. Bike racks are now shown on the plans provided in the Supplemental package.

Comment 6: There appears to be adequate pedestrian access/circulation along the south side of the building adjacent to the visitor's parking area and the east side of the building along USS Amesbury Drive. However, defined pedestrian access on the north side of the building along the access drive is



limited to the western quarter of the building. From that portion of the building there is a defined pedestrian route to a sidewalk along the access drive to Shipyard Drive East. However, there is no defined pedestrian route along the remainder of the north side of the building/access drive to provide pedestrian access/circulation from USS Amesbury Drive to Shipyard Drive East. We note that the Massachusetts Housing Partnership (MHP) eligibility letter recommended “additional pedestrian improvements in the rear.”

Response: A sidewalk has been added to the north side of the building access drive to provide pedestrian access/circulation from USS Amesbury Drive to Shipyard Drive East. Please refer to the Supplemental package.

Comment 7: The MHP eligibility letter also recommended a playground if additional property is acquired, or if additional property is not acquired, “a play area or program element identified for children should be provided.” We have not seen a play area or program element identified for children.

Response: The Applicant will further explore options as Supplemental information is provided to the Board.

Comment 8: There will be a reduction in impervious area under proposed conditions. Therefore, there will be less stormwater runoff generated from the site. The calculations included in the Stormwater Management Report show that post-development rate and volume of runoff will not exceed existing rate and volume of runoff. Also, the proposed stormwater system includes best management practices that will enhance the quality of stormwater under post-development conditions. However, we note the following:

- a. The Stormwater Management Report indicates that an Operation and Maintenance Plan for the stormwater system will be provided. This plan should be submitted for review.

Response: An Operation and Maintenance Plan for the stormwater management system is provided in the Supplemental package. Please refer to Appendix F of the Stormwater Report.

- b. In order to adequately convey the design storm without surcharge, a double grate should be provided on catch basin CB 3.

Response: The site plan and stormwater management system has been revised and the drainage area for this catch basin has been reduced substantially. Please refer to the Supplemental package



c. Although the calculations indicate that the rate of runoff will not be increased under post-development conditions, the proposed stormwater system will more effectively collect runoff and likely discharge it into the existing drainage system at higher rates than existing conditions. The adequacy of the existing drainage system to handle the flow from the development should be assessed.

Response: The Supplemental package includes revised stormwater calculations and revisions to the stormwater management system.

Comment 9: We note that a four inch domestic water service is shown. We question if this will be sufficient to adequately serve the development and trust that the required size of this service will be confirmed during final building design.

Response: The plans have been revised to indicate a 6-inch domestic water service. Final design will be provided by the project's plumbing engineer after the comprehensive permit process.

Comment 10: There are no proposed fire hydrants shown on the plans. Hydrants should be shown and the Applicant should coordinate proposed locations with the Fire Department.

Response: There are several existing fire hydrants near the proposed building; however, the Applicant will work with the Fire Department to determine if additional locations are needed.

Comment 11: ZBL Sections IV-E.2.e requires a plan showing the "exterior lighting pattern to include description and location of lighting fixtures." A photometric plan and light fixture detail should be submitted.

Response: A photometric plan and light fixture detail will be provided during the comprehensive permit process.

Comment 12: ZBL Section V-A.5.k requires that parking areas be laid out to "provide sufficient space for the storage of plowed snow unless removal by other means is assured." Snow storage areas should be shown on the plans or the Applicant should document how snow will be removed.

Response: Limited snow storage space is available on-site. Locations have been identified in the Supplemental package. The Applicant intends to remove snow from the site during larger events.

REQUESTED EXCEPTIONS/WAIVERS

Comment 1: Based on our comments above the ratios of open space per unit, and other per unit requirements may need to be revised.



Response: Please refer to the Supplemental package an updated Waiver List has been provided.

Comment 2: The Applicant is seeking a waiver from ZBL Section IV-A which is the setback requirements. They are asking for zero rear setback. However, with frontage on Lincoln Street the rear setback from the north property line would be about 23.5 feet from the main building. The proposal requires relief from the rear setback requirement but it is not for a setback of zero. The Applicant is also asking for zero setback from side property lines. We suspect this is for the setback from the south line bordering the 315 Lincoln Street property because aside from that line, the smallest side setback would be about 4.5 feet between the west property line and the bike storage structure. The Applicant should clarify this request.

Response: Please refer to the Supplemental package, an updated Waiver List has been provided. The minimum front yard is 82.6 ft., the minimum side yard is 16.1 ft. taken from the east side along USS Amesbury Drive. The minimum rear yard is 34 ft. from the building.

Comment 3: The Applicant is seeking a waiver from ZBL Section V-A.2 which requires 2 parking spaces per residential unit (500 spaces). The list of waivers proposes 1.56 spaces per unit. However, this ratio includes both the 340 resident and 52 visitor parking spaces. The Application states that the adjacent Avalon residential development currently utilizes approximately 1.5 parking spaces per residential unit, which includes visitor parking. The Applicant should provide information on the ratio of resident vs. visitor parking spaces at the existing Avalon development to confirm that the proposal will provide sufficient parking for residents, visitors and employees. We suspect that less visitor and more resident parking spaces may be needed.

Response: Based on data provided by Avalon Bay Communities, there are currently 310 outstanding parking permits issued for the existing 235 residential units, which are approximately 95% occupied. This corresponds to a residential parking demand ratio of approximately 1.29 spaces per residential unit. According to the Urban Land Institute's (ULI) publication Shared Parking, visitor parking demand (including other uses such as deliveries, etc.) for residential uses is 0.15 spaces per unit on weekdays and weekends; which corresponds to an additional 36 spaces for visitors and other users. Therefore, the overall peak parking demand for the existing Avalon Hingham Shipyard residential community is estimated at approximately 338 spaces or about 1.44 spaces per unit.

The Proposed parking supply of 298 spaces for the 190 residential units (or 1.57 spaces per unit) is expected to adequately accommodate the Project based on the current demand at Shipyard I.

Comment 4: The Applicant is seeking a waiver from ZBL Section V-A.3 with regard to aisle width where 24-feet is required for ninety degree parking. However, all aisles are shown to be 24-feet on the plans. We do not believe this waiver is necessary.



Response: An updated Waiver List has been provided due to design revisions to the Project. Please refer to the Supplemental package. 24-foot aisles are proposed for ninety degrees parking; therefore the waiver is not required.

Thank you for your review of the proposed Avalon Hingham Shipyard II development. We look forward to hearing from you should you have questions or comments.

Sincerely,

Richard E. Latini, P.E. LEEDGreen Assoc.